

Serial No. 10/747,781
60130-1734

IN THE CLAIMS:

1. (CURRENTLY AMENDED) A self-energizing brake assembly comprising:
a support pivotally mounted at an angle relative to a rotatable brake member; and
a brake pad movable along said support between engaged and disengaged positions with said rotatable brake member to generate a braking force between said brake pad and the rotatable brake member, wherein said angle of said support is variable for controlling a self-energizing gain in said braking force.
2. (ORIGINAL) The assembly as recited in claim 1, wherein said brake pad comprises a wedge and a friction element pivotally mounted to said wedge.
3. (PREVIOUSLY PRESENTED) The assembly as recited in claim 2, wherein engagement between said friction element and the rotatable brake member drives said brake pad along said support toward the rotatable brake member to increase braking force.
4. (PREVIOUSLY PRESENTED) The assembly as recited in claim 1, comprising an adjustable member biasing said support toward the rotatable brake member.
5. (ORIGINAL) The assembly as recited in claim 4, wherein said adjustable member comprises a compliant member.
6. (ORIGINAL) The assembly as recited in claim 4, wherein said adjustable member comprises a linear actuator.
7. (WITHDRAWN, PREVIOUSLY PRESENTED) The assembly as recited in claim 1, comprising a release spring to bias said brake pad in a direction opposing rotation of the rotatable brake member.

Serial No. 10/747,781
60130-1734

8. (PREVIOUSLY PRESENTED) The assembly as recited in claim 1, comprising a drive actuator to apply a force to said brake pad by decreasing said angle between the rotatable brake member and said support.

9. (WITHDRAWN, PREVIOUSLY PRESENTED) The assembly as recited in claim 8, comprising a release actuator to move said support to adjust said angle between the rotatable brake member and said support.

10. (WITHDRAWN) The assembly as recited in claim 9, wherein said drive actuator includes a drive link pivotally attached to said support, and said release actuator includes a release link, said release link and drive link including an interconnection such that actuation of said release link moves said drive link to increase said angle.

11. (WITHDRAWN) The assembly as recited in claim 10, wherein said interconnection comprises corresponding ramped surfaces on said drive link and said release link to move said drive link transversely relative to movement of said release link.

12. (PREVIOUSLY PRESENTED) The assembly as recited in claim 1, wherein said brake pad contacts an outer perimeter of the rotatable brake member.

13. (PREVIOUSLY PRESENTED) The assembly as recited in claim 1, wherein said brake pad contacts planar surfaces of the rotatable brake member.

14. (CURRENTLY AMENDED) A method of controlling braking force gain created by a self-energizing brake assembly comprising the steps of:

- a.) supporting a brake pad on a support at an angle relative to a rotatable brake member; and
- b.) changing the angle of the support relative to the rotatable brake member for controlling a self-energizing gain in braking force.

Serial No. 10/747,781
60130-1734

15. (CURRENTLY AMENDED) The method as recited in claim 14, wherein said step a.) is further defined as slidably supporting the brake pad at the angle relative to the rotatable brake member, and varying the angle relative to the self-energizing gain in braking force.

16. (WITHDRAWN) The method as recited in claim 14, comprising biasing the brake pad in a direction counter to rotation of the rotatable brake member.

17. (CURRENTLY AMENDED) The method as recited in claim 14, comprising biasing the brake pad toward engagement with the rotatable brake member with an adjustable member, and moving the adjustable member in proportion to the self-energizing gain in braking force.

18. (CURRENTLY AMENDED) The method as recited in claim 14, wherein said step b.) comprises moving the brake pad away from the rotatable brake member ~~in response to a predetermined~~ to maintain a desired magnitude of the self-energizing gain in braking force.

19. (PREVIOUSLY PRESENTED) A self-energizing brake assembly comprising:
a support pivotally mounted at an angle relative to a rotatable brake member;
a brake pad movable along said support between an engaged position and a disengaged position with the rotatable brake member to generate a braking force against movement of the rotatable brake member, wherein said braking force comprises an applied force and a gain component generated in excess of said applied force; and
an actuator for varying said angle of said support for controlling said gain component of said braking force.

20. (PREVIOUSLY PRESENTED) The assembly as recited in claim 19 wherein said actuator is a biasing member.

Serial No. 10/747,781
60130-1734

21. (PREVIOUSLY PRESENTED) The assembly as recited in claim 19 wherein said actuator is a linear actuator.

22. (PREVIOUSLY PRESENTED) The assembly as recited in claim 1, wherein said braking force comprises a constant applied force component and a generated gain component provided by the self-energizing brake assembly and said generated gain component is controlled by varying said angle of said support.